

Amendments to the Claims

Please amend the claims as follows:

1-10. (Cancelled)

11. (Currently Amended) An immunogenic composition comprising a ~~polypeptide comprising:~~

a) a polypeptide comprising an amino acid sequence sharing at least 85% identity with SEQ ID NO:34 or an antigenic fragment of at least 15 contiguous amino acids of SEQ ID NO:34;

b) FHA; and

c) pertussis toxin; ~~and~~

~~d) at least one different Bordetella antigen selected from the group consisting of:~~

~~A) at least one Bordetella iron acquisition protein selected from the group consisting of a polypeptide sharing at least 70% identity with SEQ ID 2, 4, 6, 8, 10, 12, 14, 16, 18, 20, 22, 24, 26, or 28, or an antigenic fragment of at least 15 contiguous amino acids from SEQ ID NO: 2, 4, 6, 8, 10, 12, 14, 16, 18, 20, 22, 24, 26, or 28;~~

~~B) at least one Bordetella lipoprotein selected from the group consisting of a polypeptide sharing at least 70% identity with SEQ ID NO: 56, 58, 60, 62, 64, 66, 68, 70, 72, 74, 76, 78, 80, 82, 84, 86, 88, 90, 92, 94, 96, or 98 or an antigenic fragment of at least 15 contiguous amino acids from SEQ ID NO: 56, 58, 60, 62, 64, 66, 68, 70, 72, 74, 76, 78, 80, 82, 84, 86, 88, 90, 92, 94, 96, or 98;~~

~~C) at least one Bordetella adhesin selected from the group consisting of fimbriae 2 and/or 3, or pertactin; and~~

~~D) at least one Bordetella toxin/invasin or antigens involved in toxin/invasin secretion selected from the group consisting of adenylate cyclase, dermonecrotic toxin (Dnt), Type III ss or lipopolysaccharide~~

12-52. (Cancelled)

53. (Previously presented) The immunogenic composition of claim 11 comprising a polypeptide that is expressed during the Bvg+ early phase of Bordetella infection.

54. (Previously presented) The immunogenic composition of claim 11 comprising a polypeptide that is expressed during the Bvg+ late phase of Bordetella infection.

55-64. (Cancelled)

65. (Previously presented) A vaccine comprising the immunogenic composition of claim 11.

66. (Original) The vaccine of claim 65 comprising an adjuvant.

67-72. (Cancelled)

73. (New) An immunogenic composition comprising:

- a) a polypeptide comprising an antigenic fragment of at least 15 contiguous amino acids of SEQ ID NO:34;
- b) FHA; and
- c) pertussis toxin.

74. (New) An immunogenic composition comprising:

- a) a polypeptide comprising the amino acid sequence of SEQ ID NO:34;
- b) FHA; and
- c) pertussis toxin.